

Contrast Sensor

YP11MVV80

LASER

Part Number

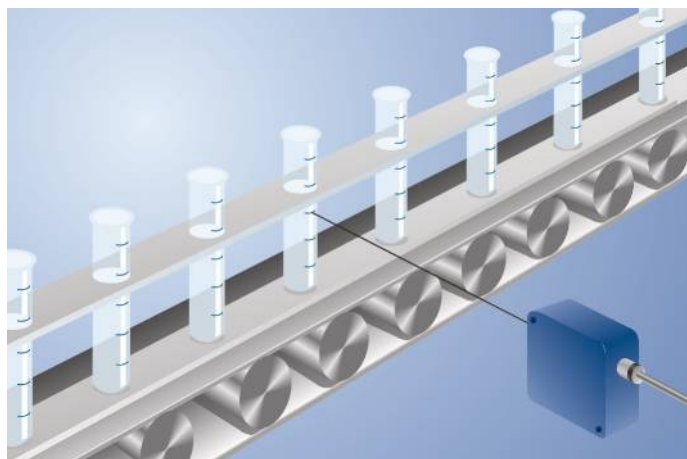


- Analog output (0...10 V DC)
- Switching frequency: 10 kHz

Technical Data

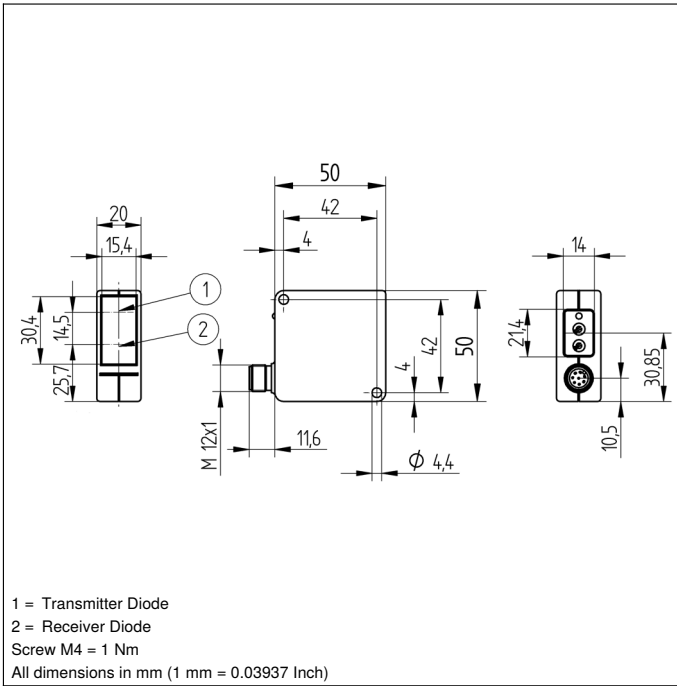
| Optical Data | |
|--|----------------|
| Working Range | 50...100 mm |
| Measuring Range | 50 mm |
| Resolution | 20 mV |
| Switching Hysteresis | 200 mV |
| Light Source | Laser (red) |
| Wavelength | 660 nm |
| Service Life (T = +25 °C) | 100000 h |
| Laser Class (EN 60825-1) | 2 |
| Max. Ambient Light | 10000 Lux |
| Light Spot Diameter at a Distance of | 100 mm |
| Electrical Data | |
| Supply Voltage | 18...30 V DC |
| Cut-Off Frequency | 10 kHz |
| Response Time | 50 μs |
| Temperature Drift | 10 mV/K |
| Temperature Range | -10...60 °C |
| Switching Output Voltage Drop | 1,5 V DC |
| PNP Switching Output/Switching Current | 200 mA |
| Analog Output | 0...10 V |
| Short Circuit Protection | yes |
| Overload Protection | yes |
| Protection Class | III |
| Mechanical Data | |
| Setting Method | Potentiometer |
| Housing Material | Plastic |
| Full Encapsulation | yes |
| Degree of Protection | IP67 |
| Connection | M12 × 1; 8-pin |
| PNP NO | ● |
| Analog Output | ● |
| Connection Diagram No. | 504 |
| Control Panel No. | P1 |
| Suitable Connection Equipment No. | 80 |
| Suitable Mounting Technology No. | 380 |

These sensors are especially well suited for high speed indication of contrast differences by means of an analog output voltage.

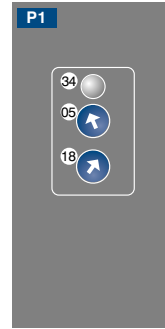


Complementary Products

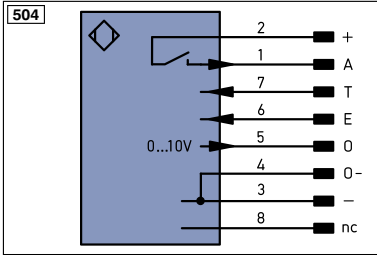
Protective Housing ZSV-0x-01
Set Protective Housing ZSP-NN-02



Ctrl. Panel



05 = Switching Distance Adjuster
 18 = Light Adjustment
 34 = Analog Voltage Output-/Switching Status



Legend

| | | | | | |
|-----------------------|--|-----------------|--------------------------------|--------------------------------------|---------------------|
| + | Supply Voltage + | PT | Platinum measuring resistor | EN ^{A/RS422} | Encoder A/Ā (TTL) |
| - | Supply Voltage 0 V | nc | not connected | EN ^{B/RS422} | Encoder B/B̄ (TTL) |
| ~ | Supply Voltage (AC Voltage) | U | Test Input | EN ^A | Encoder A |
| A | Switching Output (NO) | Ū | Test Input inverted | EN ^B | Encoder B |
| Ā | Switching Output (NC) | W | Trigger Input | A ^{MIN} | Digital output MIN |
| V | Contamination/Error Output (NO) | W- | Ground for the Trigger Input | A ^{MAX} | Digital output MAX |
| Ṽ | Contamination/Error Output (NC) | O | Analog Output | A ^{OK} | Digital output OK |
| E | Input (analog or digital) | O- | Ground for the Analog Output | SY ⁱⁿ | Synchronization In |
| T | Teach Input | BZ | Block Discharge | SY ^{OUT} | Synchronization OUT |
| Z | Time Delay (activation) | A ^{MV} | Valve Output | OL ^T | Brightness output |
| S | Shielding | a | Valve Control Output + | M | Maintenance |
| RxD | Interface Receive Path | b | Valve Control Output 0 V | r ^{SV} | reserved |
| TxD | Interface Send Path | SY | Synchronization | Wire Colors according to DIN IEC 757 | |
| RDY | Ready | SY- | Ground for the Synchronization | BK | Black |
| GND | Ground | E+ | Receiver-Line | BN | Brown |
| CL | Clock | S+ | Emitter-Line | RD | Red |
| E/A | Output/Input programmable | ± | Grounding | OG | Orange |
| | IO-Link | S ^{nR} | Switching Distance Reduction | YE | Yellow |
| PoE | Power over Ethernet | Rx+/- | Ethernet Receive Path | GN | Green |
| IN | Safety Input | Tx+/- | Ethernet Send Path | BU | Blue |
| OSSD | Safety Output | Bus | Interfaces-Bus A(+)/B(-) | VT | Violet |
| Signal | Signal Output | L ^a | Emitted Light disengageable | GY | Grey |
| Bl ^{-D} +/- | Ethernet Gigabit bidirect. data line (A-D) | Mag | Magnet activation | WH | White |
| EN ^{0/RS422} | Encoder 0-pulse 0-0̄ (TTL) | RES | Input confirmation | PK | Pink |
| | | EDM | Contactor Monitoring | GN ^{YE} | Green/Yellow |

Output Graph

